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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,569	10/11/2001	Debasis Dawn	6933-60198 08594-01	1470

7590

11/12/2003

Sheppard Mullin Richter & Hampton LLP
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EXAMINER

LEE, BENNY T

ART UNIT

PAPER NUMBER

2817

DATE MAILED: 11/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
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EXAMINER	
ART UNIT	PAPER NUMBER

DATE MAILED:

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

- ☐ This application has been examined ☒ Responsive to communication filed on 24 July 2002 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire two (2) months from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-648. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449 | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474 | 6. <input type="checkbox"/> _____ |

Part II SUMMARY OF ACTION

1. ☒ Claims 1, 2, 4-17, 19-23 are pending in the application.
Of the above, claims _____ are withdrawn from consideration.
2. ☒ Claims 3, 18 have been cancelled.
3. ☒ Claims 1, 2, 4-9, 21, 22, 10-12, 23, 13-17, 19, 20 are allowed.
4. ☐ Claims _____ are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.
8. ☐ Allowable subject matter having been indicated, formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. These drawings are: ☐ acceptable; ☐ not acceptable (see explanation).
10. ☐ The _____ proposed drawing correction and/or the _____ proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☒ The proposed drawing correction, filed 24 July 2002, has been ☒ approved. ☐ disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections MUST be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.
12. ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in patent application, serial no. _____; filed on _____.
13. ☒ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other _____

SN 976569

Art Unit: 2817

This application is in condition for allowance except for the following formal matters:

In the Specification:

The disclosure is objected to because of the following informalities: In the replacement paragraph to page 8, lines 3-28, should "via 29" correctly be --via 32--? Note that the following reference labels need to be explicitly described with respect to the corresponding drawing description: fig. 1 (29, 39). Also, note that a detail description of newly presented "Fig. 8" should be provided. Appropriate correction is required.

In the Drawings:

The drawings are objected to because in Fig. 4, reference label -29-- needs to be labeled as per the replacement paragraph to page 8, lines 3-28 (see above objection). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

In the Claims:

The following claims have been found objectionable for reasons set forth below:

In claim 13, last paragraph, note that "its" should be rewritten as --the-- for clarity

In claim 15, lines 2, 3, note that "of the substrate layer" should be deleted from it's present location in line 2 and reinserted after "surface" in line 3 for a proper characterization.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Art Unit: 2817

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Claims 1, 2, 4-9, 21, 22; 10-12, 23; 13-17, 19, 20 are allowable over the closest prior art to Crochet for the following reasons. With respect to independent claim 1, the amended limitation of the conductive trace on the second surface being connected through the substrate to the patch antenna by a conductive via, along with applicants' arguments that the figs. 3b & 3c embodiments of Crochet does not teach or suggested combining the conductive trace on the second surface while having a ground ring layer on the first surface, as set forth at page 23 of applicants' response, patentably distinguishes over the Crochet. However, it should be noted that the arguments pertaining to dimensional & frequency attributes, leakage problems & uniform gap are not commensurate with the claimed invention and hence such arguments were not persuasive in the indicated allowability of claim 1 & claims dependent therefrom. With respect to independent claim 10, the additional limitation of a non-uniform gap distinguishes this claim over the Crochet. With respect to independent claim 13, the claim limitation of the closed loop ground strip being the mirror image of the waveguide lip as well as the second conductive pad distinguishes the claim over Crochet.

Any inquiry concerning this communication should be directed to Benny Lee at telephone number 308-4902.


BENNY T. LEE
PRIMARY EXAMINER
ART UNIT 2817